

DRAFT

ATTACHMENT 1

STATEMENT OF WORK

for

**ALARM, ACCESS CONTROL, AND CLOSE CIRCUIT  
TELEVISION (CCTV)**

**ASSESSMENT SYSTEM MAINTENANCE**

APRIL 28, 2006

Alarm, Access Control and Closed Circuit Television (CCTV) Assessment System Maintenance and Expansion Requirement

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## **Part 1 - SCOPE:**

The National Nuclear Security Administration (NNSA) - Service Center, Albuquerque, New Mexico (SC) requires maintenance, continued system expansion and possible addition (new system requirement) aside from the existing WinDSX Security Access Control, Intrusion Detection, Alarm Annunciation and Closed Circuit Television (CCTV) Assessment System. The contractor shall provide maintenance of installed system hardware and software to both the access and CCTV systems. The service provider will maintain the currently installed system for 1 year with possible 2 one-year extension options.

The Service Center complex includes two parking lots (north and south), north campus buildings 380, 388, 392, a cluster of buildings (12) designated in the "Limited Area" (which is encircled by security fencing), south campus, portable building cluster (6), and warehouse bldg. 397 (see map Appendix A Section 1). The Contractor will provide access control at turnstiles located at the south campus entrance and American's with Disabilities Act (ADA) gate to a fenced area surrounding the buildings and multiple entry point interior to the site's building. The system will support intrusion detection alarms and CCTV at entry doors to the specified buildings, vault type rooms and selected individual rooms within the buildings. In an effort to maintain efficiency and consistency and to minimize user setup and upkeep all aspects described above are performed using two single PC based systems and databases.

## **Part 2 - GENERAL:**

### **2.1 Description of Work**

2.1.1 Contractor shall furnish labor and materials required to maintain, expand or upgrade the system as specified in Part 1 according to the needs of the NNSA. This includes maintenance, installation, testing, as-builts, wiring diagrams, drawings, prints, and documentation of all components specified herein. The contractor will provide physical on-site support two (2) day of each week during contract maintenance period.

2.1.2 Contractor shall provide materials and equipment conforming to their specifications and other applicable codes and standards complying with design intent, quality, capacity, and performance shown or specified. All material and/or equipment necessary for proper operation of the System not specified or described herein shall be deemed part of the specifications. Contractor is to review the condition of any existing equipment for suitability to be included in the maintenance portion assuming it meets the full intent of these specifications and manufacturers requirements. All newly installed equipment components provided shall be of new condition as shipped from the manufacturer.

2.1.3 "As Built" wiring diagrams/drawings/prints shall be developed as equipment (hardware/wiring) is expanded, upgraded and/or installed. The contractor is responsible to review current wiring and communication lines and advise the System Administrator of any problems that may affect the proper operation of specified System. The contractor is responsible to inform System Administrator in writing that contractor accepts conditions "as is" and will maintain, expand and and/or install a complete and operational Security System.

2.1.4 All equipment components shall be connected to PC based System in location specified for real-time monitoring, control, and management. These main processing units (PC) must be mobile.

## **2.2 Related Work/Period of Performance**

2.2.1 A walk-thru of the site facilities is planned and required of potential bidders, in addition, examination of all available project drawings and prints for requirements that affect the installation of specified System. Document and report any additional work or components needed and provide to System Administrator before bid is submitted.

2.2.2 The contractor will provide maintenance on the complete system for a period of 1 year with 2 one year extension options. Maintenance work activities shall include any equipment added to the system, to include additional upgrade, expansion or creation of new system requirements.

2.2.3 Contractor (Certified system provider) must be able to respond within 1 hour once contacted for emergency situations and provide on-site support for two (2) day of each week during contract period.

2.2.4 Provide training for System users on DSX technical and administrative operations.

2.2.5 The CCTV system will be maintained, upgraded or expanded to provide sufficient resolution to discern issues regarding access to the "Limited Area." This includes identification, installation, and maintenance of needed hardware upgrades.

2.2.6 Provide administrative paperwork as required in order to maintain system and provide reporting capabilities of the Facility Security Officer or the System Administrator.

## **2.3 Submittals**

2.3.1 Submit manufacture's product data, specifications, and maintenance instructions for each type of equipment required.

2.3.2 Submit two (2) complete and legible hardcopy "as-built" wiring diagrams and straight line drawings showing the entire system. In addition, diagrams and drawings must be provided in CD Rom (backup) format.

2.3.3 The contractor shall maintain records of all emergencies, non-emergency corrective maintenance, preventive maintenance, and modifications performed.

## **2.4 Quality Assurance**

2.4.1 Contractor shall have at least 3 years experience in the Access Control Industry and specifically must have at minimum two fully certified DSX (DSX Access Systems, Inc.) trained technician(s)/engineer(s).

2.4.2 Contractor must be a U.S.Citizens and have the ability to obtain a "Q" level Security clearance.

2.4.3 Contractor shall maintain a 60% equipment supply of replacement parts for equipment provided with the ability to obtain any replacement parts within a 24 hour period. All major replacement parts must be off-the-shelf and system must be mobile.

2.4.4 One spare of each product provided shall be included with installed system for vital equipment or as the System Administrator deems necessary. (i.e., master control panel)

2.4.5 Manufacture of specified products shall have a toll free assistance line with 24hour emergency support for contractor assistance.

2.4.6 Any System or component proposed as an equal to that specified shall be proven to be such by contractor who shall submit the manufactures name and model numbers of substitute equipment with working and shop drawings in a time frame specified by System Administrator. Contractor shall receive System Administrator approval in writing prior to bidding substitute equipment.

### **Part 3 – General System Description:**

#### **3.1 General Software Descriptions**

3.1.1 The WinDSX Access Control Software operates as an "off the shelf" compatible PC based program without special or proprietary hardware. The WinDSX software must be the latest version available and updated as new versions are released.

3.1.2 The System shall support LAN operations, or fiber optics, or hardwire communication capability using the TCP/IP protocol.

3.1.3 The System communication shall be protected by line supervision so that loss of or tampering of signal will annunciate at alarm station.

3.1.4 The System shall contain tamper sensor points for all sensors, junction boxes, and other vital system equipment.

3.1.5 The System shall operate 24 hours a day, 7 days a week, 365 days a year.

3.1.6 The System shall support duress/panic alarms.

3.1.7 The System application software shall be site licensed not seat licensed.

3.1.8 The System shall allow for simultaneous multi-tasking operations.

3.1.9 The computer system software shall have sufficient security features to allow only authorized individuals access to programming and control features.

#### **3.2 General Hardware Descriptions**

3.2.1 The controller of every location shall be designated as a Master.

3.2.2 The System shall function normally in typical Albuquerque, New Mexico weather extremes.

3.2.3 The System shall have automatic and manual data backup to suitable storage media (CD/DVD Rom media).

3.2.4 The System wiring/cabling shall be UL Certified, shielded, and of sufficient gauge and quality to handle the demands of the system.

3.2.5 The System shall be capable of expanding/upgrading to accommodate "smart card" technology.

### **3.3 Video and Closed Circuit Television (CCTV) Description**

3.3.1 The video images shall be displayed and monitored at the alarm station.

3.3.2 The video images shall be clear and of sufficient quality for surveillance and assessment purposes during day and night operations. It must “leaf or pan” through multiple cameras in a 4-plex display.

3.3.3 The system shall allow for manual switching of camera views or for automatic view switching.

3.3.4 Video and CCTV cabling will be shielded and of sufficient gauge and quality to meet system demands.

3.3.5 Video assessment shall be possible on the north and south campus, south guard gate, ADA gate, perimeter gates, and warehouse.

3.3.6 Video surveillance/assessment shall be possible at 16+ vault type rooms.

3.3.7 In event of alarm activation, the affected CCTV camera will display a view of the alarm location if applicable and be capable of isolating alarm display and dragging image to a separate monitor for assessment.

3.3.8 Video camera installation/coverage will coincide with current site lighting so that night surveillance is effective.

### **3.4 General System Structure Descriptions**

3.4.1 The System shall have suitable surge protection.

3.4.2 All installed components shall be inspected and certified by a NNSA cyber security individual.

3.4.3 The first controller of every location shall be designated as the Master.

## **Part 4 – Interface Criteria**

### **4.1 Badge System**

4.1.1 The system shall integrate with ANSI standard compatible magnetically encoded card reader.

4.1.2 The card reader shall read magnetic stripes that comply with ANSI X4.16-1983

4.1.3 The System shall be capable of integrating with the currently installed badge system.

4.1.4 The System shall be capable of sharing the badge system database

### **4.2 Physical Security**

4.2.1 The System main control panel (communication server) is physically located in within the Service Center Limited Area. The main communication server must be mobile.

4.2.2 The control panel (for alarm acknowledgement and video assessment) shall be located in a room not viewed/accessed by site employees or visitors.

4.2.3 The physical protection of VTR doors, walls and ceilings shall not be compromised or weakened during installation or operation.

### **4.3 Backup Power**

4.3.1 The system shall operate uninterrupted during a power loss either through the use of batteries and/or a UPS

4.3.2 The contractor is to ensure current Service Center backup power system (generators) will handle the increased load of the new system in case of sustained power outage (beyond the life of battery backup).

## **Part 5 – Acceptance and Training**

### **5.1 Training**

5.1.1 The Installing Contractor shall provide a minimum of 16 hours of on site training, as required by the System Administrator.

5.1.2 The contractor shall maintain records of the training periods given. Any part of the initial 16 hours of training not utilized prior to the end of the system commissioning shall be available for future training of the Owners representatives during the first twelve months.

### **5.2 Testing**

5.2.1 All equipment is to be pre-tested by the Contractor before installation.

5.2.2 The system should be tested by the Contractor and System Administrator or Government subject matter expert (SME) upon completion, and the test should consist of but not be limited to all electronic and mechanical devices and not excluding Software/Firmware.

### **5.3 Acceptance**

5.3.1 Before acceptance of the completed installation, the following performance standards must be met.

- All mechanical devices must be operational without downtime for a period of 30 days.
- All electronic equipment must be operational without downtime or programming problems for a complete month.
- For each 4 hours of downtime, 1 day will be added to the acceptance cycle for both electronic and mechanical devices.
- Upon completion of the system testing and before the acceptance cycle two copies of system manual will be provided to the Govt.

### **5.4 Warranty**

6.1.1 All equipment is to be covered by a manufacture's warranty via the Contractor, covering all parts and labor for a one year period, excluding misuse, vandalism, and act of nature.

5.4.2 All warranties commence when the system installation is 100% complete and the acceptance cycle is finished.

## **Part 6 – Safety Plan and Job Hazard Analysis Requirements**

- 6.1.1 Safety Plan: The contractor is required to submit a Safety Plan and Job Hazard Analysis prior to work beginning.
- 6.1.1 Safety meeting shall be conducted weekly and attendance records documented and available if asked for.
- 6.1.2 Report accidents to NNSA SC CSD Safety Representative by filling out a form 5484.3
- 6.1.3 Safety shoes are required on site: ANSI Z41.
- 6.1.4 Eye protection will be worn at all times while working: ANSI 87.1
- 6.1.5 Hard hats are required on site while working where any overhead hazard exists: ANSI Z89.1.
- 6.1.6 As applicable update your ladder safety section with 29 CFR 1926.1053 and or 29 CFR 1910.25/26. Also, use only non-conductive ladders. In high traffic areas, cone, tape or flag off work areas around ladders so unauthorized personnel will not enter a construction/hardhat area.
- 6.1.7 If scaffolds are used on site, as applicable update your scaffolds/platforms section with 29 CFR 1910.28 and or 29 CFR 1926.450.
- 6.1.8 No energized electrical work above 50 volts will be performed (unless work is performed by a certified/ licensed electrical contractor). All wires will be considered energized until properly locked and tagged out. If you have the occasion to lock and tag out any electrical equipment you must update your electrical section with 29 CFR 1910.147 and coordinate with local contractor maintenance service provider.
- 6.1.9 Extension Cord Usage: Generally, daisy chaining of extension cord sets is prohibited unless specifically allowed by the manufacturer and listed for this application.
- 6.1.10 Extension cords should be visually inspected before each use.
- 6.1.11 Extension cord sets used on construction sites and used with portable metal electric tools and appliances shall be of three-wire type and shall be designed for hard or extra-hard usage.
- 6.1.12 Flexible cords used with temporary and portable lights shall be designed for hard or extra-hard use. OSHA recognizes hard-service cord (types S, ST, SO, and STO) and junior-hard service cord (types SJ, SJO, SJT, and SJTO) as suitable for extra-hard and hard use. Note: Extension cords approved for outdoor use may be identified by "outdoor" or "W-A" on the jacket. Flexible cord sets shall be listed as an assembly by a national recognized testing laboratory (See Section 2.5). Flexible cord sets used on construction sites shall contain the number of conductors required for the circuit plus an equipment grounding conductor. The cords shall be hard use or extra-hard use as specified in the NEC.
- 6.1.13 Fall Protection: The contractor shall comply with requirements specified in 29 CFR 1926.500, Fall Protection. The contractor shall...
- 6.1.14 Obtain a roof entry permit from the project Safety Engineer or representative if required



- 6.1.15 Monitor weather hazards (wind, rain snow, lighting etc.). If wind speeds or gusts are 25 MPH or above, all personnel will stop work and come down from the roof.
- 6.1.16 Ensure that individuals working on roofs have been trained in Fall Protection
- 6.1.17 Obtain applicable permits from the Project Safety Engineer or representative (e.g., prior to cutting, welding, open flame burning, or use of tar kettles and roof solvents; roof entry, confined space entry; penetration of walls, ceilings, or floors; etc.).
- 6.1.18 Maintain applicable Material Safety Data Sheets (MSDS's) at the construction site.
- 6.1.19 Provide a Bulletin Board at or in proximity of the construction site with the following information: i.e., OSHA Poster, DOE Project Identification Poster, Wage Scale, Name of Contractor, Contactor Point of Contact, name of Contractor Safety Representative, emergency phone numbers, name and phone number of Superintendent, name and phone number of Project Manager, and any other relevant information. Posting of all this information on walls without a Bulletin Board will not be permitted.
- 6.1.20 Provide and post hazard signage and barricades necessary to warn and control pedestrian and vehicular traffic.
- 6.2 Job Hazard Analysis
- 6.2.1 The following is a list of common potential construction related hazards to consider when performing a hazard analysis:

#### **Example Site Hazards**

- Asbestos containing building materials
- Lead-based paint
- PCBs (Light Ballast)
- Confined spaces
- Energized systems (including potentially hidden and overhead system)
- Electrical
- Mechanical (e.g., fans, motors, steam, gas, etc)
- Biological - venomous snakes, anthropoids, insects, infectious organisms (e.g., impacting sewer lines).
- Noise
- Weather extremes (e.g., heat, cold, lighting, high winds).
- Elevated environments (e.g., roofs, overhead spaces, etc.).
- Vehicular/Pedestrian Traffic
- Uneven terrain

#### **Some Typical Hazard Introduced by Construction Activities**

- Work from Elevated surfaces
- Mechanized equipment (e.g., cranes, front end loaders, backhoes)
- Hoisting and rigging
- Heavy material handling
- Airborne particulate - asbestos, lead-based paint, silica, welding fume, nuisance dust, etc.
- Use of chemicals [think in terms of potential exposure routes (e.g., inhalation, dermal, eye, ingestion)]

- Hot work
- Excavation and trenching
- Electrical - flexible cords, power tools, etc.
- Noise
- Flying objects
- Vibration
- Falls
- Wall, floor, and roof openings
- Structural collapse
- Slip, trips, and falls